

CLAIMS

What is claimed is:

1. A gateway device with private branch exchanging function comprising:

means for connecting with each of a private exchanging network, a public switched telephone network, and a computer communication network;

means for determining which network is to be used based on identifying information, when receiving image data and the identifying information of a destination of the image data from a facsimile machine connected to the private exchanging network; and

means for transmitting the image data to the determined network.

2. The gateway device with private branch exchanging function according to claim 1 further comprising:

means for judging whether or not the transmission of the image data to the computer communication network has been completed; and

retransmitting means for retransmitting the image data to the public switched telephone network when the means for judging judges that the transmission has not been completed.

3. The gateway device with private branch exchanging function according to claim 2 wherein the retransmitting means makes confirmation of carrying out the transmission of the image data to the public switched telephone network with the facsimile machine, and transmits or does not transmit the image data to the public switched telephone network based on a result of the confirmation.

4. The gateway device with private branch exchanging function according to claim 1 further comprising:

means for carrying out the transmission of the image data to the computer communication network in real time communication by T.38 protocol.

5. The gateway device with private branch exchanging function according to claim 2 further comprising:

means for carrying out the transmission of the image data to the computer communication network in real time communication by T.38 protocol.

6. The gateway device with private branch exchanging function according to claim 3 further comprising:

means for carrying out the transmission of the image data to the computer communication network in real time communication by T.38 protocol.

7. The gateway device with private branch exchanging function according to claim 1 further comprising:

means for carrying out the transmission of the image data to the computer communication network in electronic mail format communication by SMTP (Simple Mail Transfer Protocol).

8. The gateway device with private branch exchanging function according to claim 2 further comprising:

means for carrying out the transmission of the image data to the computer communication network in electronic mail format communication by SMTP (Simple Mail Transfer Protocol).

9. The gateway device with private branch exchanging function according to claim 3 further comprising:

means for carrying out the transmission of the image data to the computer communication network in electronic mail format communication by SMTP (Simple Mail Transfer Protocol).

10. A gateway device with private branch exchanging function comprising:

means for connecting with each of a private branch network, a public switched telephone network and a computer communication network; and

means for determining which network is to be used based on identifying information when receiving the identifying information of a destination from a facsimile machine connected to the private branch network.

11. The gateway device with private branch exchanging function according to claim 10 further comprising:

means for receiving image data from the facsimile machine, accumulating the received image data when the means for determining determines that the computer communication network is to be used, and then transmitting the image data to the computer communication network.

12. The gateway device with private branch exchanging function according to claim 10, wherein the means for connecting connects the facsimile machine to the private branch network when the means for determining determines that the private branch network is to be used, and connects the facsimile machine to the public switched telephone network when the means for determining determines that the public switched telephone network is to be used.

13. The gateway device with private branch exchanging function according to claim 11 further including:

means for acquiring an IP address of another gateway device located in an area related to the destination, based on the identifying information when the computer communication network is to be used, wherein the image data is transmitted to the another gateway device.

14. The gateway device with private branch exchanging function according to claim 11 further including:

means for judging whether or not the transmission of the image data to the computer communication network has been completed.

15. The gateway device with private branch exchanging function according to claim 14 further including:

means for making confirmation of carrying out retransmission of the image data with the facsimile machine when the means for judging judges that the transmission of the image data to the computer communication network has not been completed; and

retransmitting means for retransmitting the image data to the public switched telephone network when a result of the confirmation is approval of the retransmission.

16. A method of transmitting image data comprising the steps of:

(A) receiving image data and information of a destination of the image data from a facsimile machine connected to a private exchanging network;

(B) determining which network of the private exchanging network, a public switched telephone network, and a computer communication network is to be used; and

(C) transmitting the image data to the network determined in step (B).

17. The method according to claim 16 further including the step of:

(D) judging whether or not transmission of the image data has been completed when the image data is transmitted to the computer network in step (C).

18. The method according to claim 17 further including the steps of:

(E) asking the facsimile machine whether or not retransmission of the image data to the public switched telephone network is to be carried out when in step (D), it is judged that the transmission of the image data has not been completed; and

retransmitting the image data to the public switched telephone network when a result of asking in step (E) is approval of retransmission.

19. The method according to claim 16, wherein when the network determined in step (B) is the computer network, the transmission of the image data is carried out in real time communication by T.38 protocol in step (C).

20. The method according to claim 16 wherein when the network determined in step (B) is the computer network, the transmission of the image data is carried out in electronic mail format communication by SMTP (Simple Mail Transfer Protocol) in step (C).